

Notice of Allowability

Application No.

09/998,682

Applicant(s)

FERRARI ET AL.

Examiner

Cam Y T. Truong

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 12/1/2005.
2. ☒ The allowed claim(s) is/are 47-64.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some* c) ☐ None of the:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

* Certified copies not received: _____.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.

THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
- (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached
- 1) ☐ hereto or 2) ☐ to Paper No./Mail Date _____.
- (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date _____.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☒ Information Disclosure Statements (PTO-1449 or PTO/SB/08),
Paper No./Mail Date 8/26/04, 12/22/04, 3/4/05, 9/26/05
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application (PTO-152)
6. ☒ Interview Summary (PTO-413),
Paper No./Mail Date _____.
7. ☒ Examiner's Amendment/Comment
8. ☒ Examiner's Statement of Reasons for Allowance
9. ☐ Other _____.

DETAILED ACTION

1. Applicant has amended claims 47 and 50 in the amendment filed on 12/1/2005. Claims 47-64 are pending in this Office Action.

EXAMINER'S AMENDMENT

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Attorney Steinberg, Don, Registration No. 40326 on 10/21/2005.

In the abstract:

A data-driven system and method enable search and navigation of sets of documents or other materials by certain common attributes that characterize the materials. The system associates terms with the materials, defining a set of hierarchical relationships among the terms, and providing a guided navigation mechanism based on the relationships between the terms. The system permits users to search or browse a particular collection of documents by selecting desired values for the attributes or by searching attribute-value pairs. The system also provides a search mechanism that can respond to free-text queries with single-term or multi-term interpretations. Implementations of the invention may be scalable through parallel or distributed computation.

In the claims:

Please replace claims 47 and 50 with amended claims 47 and 50.

47. (currently amended) A computer-implemented method for retrieving information associated with a set of materials, the method comprising:

storing in a data structure a plurality of attribute-value pairs associated with the materials, wherein each of a plurality of values has an association with one of a plurality of attributes characterizing the materials;

computing dynamically at run time a plurality of navigation states using the data structure, each navigation state corresponding to a particular set of attribute-value pairs and to a particular subset of the materials, the plurality of navigation states including a first navigation state and a second navigation state;

accepting a free-text query directed at the materials and received from a search interface including a free-text search tool for accepting free-text queries;

retrieving, in response to the free-text query, information derived from one of the first navigation state and the second navigation state;

outputting the retrieved information; and wherein:

the first navigation state corresponds to a first expression that includes a multi-term interpretation of the free-text query, the first expression including a conjunction of a first attribute-value pair having a first attribute and a second attribute-value pair having a second attribute;

the particular subset of the materials corresponding to the first navigation state includes a first collection of the materials, wherein each of the materials in

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the first collection of the materials is described by the first attribute-value pair and is described by the second attribute-value pair;

the second navigation state corresponds to a second expression that includes the first attribute-value pair and a third attribute-value pair, the second navigation state being different from the first navigation state;

the particular subset of the materials corresponding to the second navigation state includes a second collection of the materials, wherein each of the materials in the second collection of the materials is described by the first attribute-value pair;

the first attribute characterizes a first subset of the materials and the first attribute-value pair does not describe all the materials in the first subset of the materials;

the second attribute characterizes a second subset of the materials and the second attribute-value pair does not describe all the materials in the second subset of the materials; and

the first attribute-value pair and the second attribute-value pair are mutually incomparable.

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50. (currently amended) A computer program product, residing on a computer-readable medium, for use in retrieving information associated with a set of materials, the computer program product comprising instructions for causing a computer to:

provide a search interface including a free-text search tool for accepting free-text queries;

compute dynamically at run time a plurality of navigation states including a first navigation state and a second navigation state, each navigation state corresponding to a particular set of attribute-value pairs and to a particular subset of the materials, wherein each of a plurality of values has an association with one of a plurality of attributes characterizing the materials, and wherein the attribute-value pairs are accessed from a data structure;

accept a first free-text query directed at the materials;

retrieve, in response to the free-text query, information derived from one of the first navigation state and the second navigation state;

output the retrieved information; and wherein:

the first navigation state corresponds to a first expression that includes a multi-term interpretation of the first free-text query and includes a conjunction of a first attribute-value pair having a first attribute and a second attribute-value pair having a second attribute;

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the particular subset of the materials corresponding to the first navigation state includes a first collection of the materials, wherein each of the materials in the first collection of the materials is described by the first attribute-value pair and is described by the second attribute-value pair;

the second navigation state includes the first attribute-value pair and a third attribute-value pair, the second navigation state being different from the first navigation state;

the first attribute characterizes a first subset of the materials and the first attribute-value pair does not describe all the materials in the first subset of the materials;

the second attribute characterizes a second subset of the materials and the second attribute-value pair does not describe all the materials in the second subset of the materials; and

the first attribute-value pair and the second attribute-value pair are mutually incomparable.

Allowable Subject Matter

3. Claims 47-64 are allowed.

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 47, wherein “retrieve, in response to the free-text query, information derived from one of the first navigation state and the second navigation state; wherein the first navigation state corresponds to a first expression that includes a multi-term interpretation of the first free-text query and includes a conjunction of a first attribute-value pair having a first attribute and a second attribute-value pair having a second attribute; the particular subset of the materials corresponding to the first navigation state includes a first collection of the materials, wherein each of the materials in the first collection of the materials is described by the first attribute-value pair and is described by the second attribute-value pair; the second navigation state includes the first attribute-value pair and a third attribute-value pair, the second navigation state being different from the first navigation state; the first attribute characterizes a first subset of the materials and the first attribute-value pair does not describe all the materials in the first subset of the materials; the second attribute characterizes a second subset of the materials and the second attribute-value pair does not describe all the materials in the second subset of the materials”; and

The prior art of record alone or in combination, does not teach or fairly suggest the combination of steps as recited in independent claim 50, wherein “retrieve, in response to the free-text query, information derived from one of the

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first navigation state and the second navigation state; wherein the first navigation state corresponds to a first expression that includes a multi-term interpretation of the first free-text query and includes a conjunction of a first attribute-value pair having a first attribute and a second attribute-value pair having a second attribute; the particular subset of the materials corresponding to the first navigation state includes a first collection of the materials, wherein each of the materials in the first collection of the materials is described by the first attribute-value pair and is described by the second attribute-value pair; the second navigation state includes the first attribute-value pair and a third attribute-value pair, the second navigation state being different from the first navigation state; the first attribute characterizes a first subset of the materials and the first attribute-value pair does not describe all the materials in the first subset of the materials; the second attribute characterizes a second subset of the materials and the second attribute-value pair does not describe all the materials in the second subset of the materials.”

The dependent claims, bring definite, further limiting, and fully enabled by the specification are also allowed.

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Contact Information

4. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Cam Y T Truong whose telephone number is (571) 272-4042 . The examiner can normally be reached on Monday to Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John Breene can be reached on (571) 272-4107. The fax phone number for the organization where this application or proceeding is assigned is (571) 272-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



Cam-Y Truong
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